

The following comments were made during a Clean Air Interstate Rule Workgroup meeting in June 2006.

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**Comments of Clean Air Interstate Rule Workgroup on proposed rule 10 CSR 10-6.366 Clean Air Interstate Rule Seasonal SO<sub>2</sub> Trading Program.**

The following comments on the Missouri Department of Natural Resources' Air Pollution Control Program's draft proposed rule in response to the Environmental Protection Agency's Clean Air Interstate Rule were submitted verbally by the workgroup.

The workgroup commented that the exemptions for low emitting and low run hour units found in subsection (1)(B) of the rule should not be mandatory. They workgroup would like for the language to be amended to make the exemption voluntary as requested by the owner or operator of the unit.

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The following comments were submitted by the City of Higginsville on July 17, 2006.

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**Comments of the City of Higginsville on rules 10 CSR 10-6.362 Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program, 10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program, and 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**

The following comments on the Missouri Department of Natural Resources Air Pollution Control Program's draft proposed rule in response to the Environmental Protection Agency's Clean Air Interstate Rule were submitted by the City of Higginsville.

- (a) Higginsville's units qualify as Low Mass Emission (LME) units as defined in 40 CFR Part 75, as an alternative to installation of a Continuous Emission Monitoring System (CEMs). However, the default emission rates are more than 4 times that of the Subpart GG tested emission rates. Based on this factor, the City of Higginsville would either have to pay for unit specific testing or accept the default emission rate. The units specific testing is to be conducted every five years and will cost an estimated \$150,00 in fuel alone, based on current fuel prices. Testing company charges have historically been \$15,000-\$20,000 per unit. This total amount would have to be compared with the market price of the additional allowances required by the default emission rates. The additional operating hours required for testing would also require the purchase of additional allowances, not otherwise needed. Both the emissions produced by unit specific testing and additional allowances required by the default rates, would unnecessarily remove allowances from the market, thereby constraining the market.

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The following comments on the Missouri Department of Natural Resources Air Pollution Control Program's draft proposed rule in response to the Environmental Protection Agency's Clean Air Interstate Rule were submitted by the City of Higginsville.

Higginsville's units qualify as Low Mass Emission (LME) units as defined in 40 CFR Part 75, as an alternative to installation of a Continuous Emission Monitoring System (CEMs). However, the default emission rates are more than 4 times that of the Subpart GG tested emission rates. Based on this factor, the City of Higginsville would either have to pay for unit specific testing or accept the default emission rate. The unit specific testing is to be conducted every five years and will cost an estimated \$150,000 in fuel alone, based on current fuel prices. Testing company charges have historically been \$15,000-\$20,000 per unit. This total amount would have to be compared with the market price of the additional allowances required by the default emission rates. The additional operating hours required for testing would also require the purchase of additional allowances, not otherwise needed. Both the emissions produced by unit specific testing and additional allowances required by the default rates, would unnecessarily remove allowances from the market, thereby constraining the market.

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The following comments were submitted by the City of Chillicothe on July 28, 2006.

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**Comments of the City of Chillicothe on rules 10 CSR 10-6.362 Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program, 10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program, and 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**

Chillicothe Municipal Utilities (CMU), located in Chillicothe, Missouri operates for identical combustion turbines. The four combustion turbines are subject to the proposed Clean Air Interstate Rules (CAIR) because they serve a generator greater than 25 MW. However, if each engine had its own generator, they would not be subject to any of the proposed regulations.

CMU supports the exemption language referenced in each of the proposed State of Missouri rules for units that qualify as low emission or low run hour units. The exemption language allows periodic operation of such units when needed, without compromising the goals of CAIR.

Economics usually dictate when combustion turbines operate, in order to limit customer exposure to extremely high market prices (when other, cheaper sources of power are not available). There are other times, and usually in the summer months, when the normal flow of power is curtailed or interrupted due to transmission problems or storms. These interruptions require a back up source of power that combustion turbines can provide until problems are corrected. However, to operate them for extended periods of time is cost prohibitive. CMU's turbines historically are used less than ½ to 1% of the time available in a year.

Currently, each of the combustion turbine engines can operate up to 400 hours during the May to September months and remain in compliance with 10 CSR 10-6.350. The proposed language in 10 CSR 10-6.364 would change this to 350 hours. Actual run time during the ozone season is about 40 hours per engine, or less than 10% of the run time needed to retain the proposed exemption. With the exemption language in the proposed rules, compliance will continue to be achieved by keeping track of each of the combustion turbine engine's run hours.

Without the exemption language in the proposed rules, additional monitoring, recordkeeping and reporting will be required. CMU would also be required to purchase NOx and SO2 allowances at a substantial cost to CMU and the community it serves, but without any perceived environmental benefit.

Without the exemption language, CMU will be required to report emissions based on continuous emission monitoring data, site specific test results or use default emission values allowed for Low Mass Emission (LME) units. Each of these options for reporting emissions created additional monitoring and recordkeeping, adding a substantial cost to CMU for every hour of operation. If all four turbines were to be tested to report emissions using site specific emission rates, the estimated cost for the fuel could reach \$336,000. And the amount of NOx emissions to perform the test would exceed the actual emissions reported for 2004. Without the factors; however, these emission factors overstate emissions compared to actual emissions. Other costs to account for additional recordkeeping, quarterly emission reporting and annual flow meter calibrations is expected to raise the actual cost to CMU to three to four times the market price of the allowances. As the rules are proposed, the exemption for low emission or low run hour units avoids the added cost to otherwise prove their emissions are indeed low.

With the proposed exemption, CMU will continue to avoid participation in the SO2 trading program. The proposed exemption allows CMU to avoid the cost for monitoring, recordkeeping, reporting and trading of SO2 emissions for what historically has averaged less than a 0.25 tons of SO2 emissions per year over the last 5 years from all four combustion turbines combined. Such a small source should continue to be exempt.

Independent of the above, the emissions from the CMU turbines are not expected to influence the goals of CAIR. The air quality impact from these units, because of their short stacks and low emissions, will have no quantifiable effect on any instate or downwind ozone non-attainment area affected by CAIR. CMU's average NOx emissions for the past 5 years were 8.3 tons (0.014% of the annual proposed statewide budget) and 6.8 tons for the ozone season (0.024% of the ozone season proposed statewide budget).

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## **Comments of the U.S. Environmental Protection Agency on rule 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**

The comments listed below should be considered preliminary comments. Additional comments that may be submitted during the formal comment period. EPA issued final changes to the CAIR model rules on April 28, 2006, i.e., technical corrections to the rules and rule changes to integrate the CAIR model trading program rules with the CAIR Federal Implementation Plan (FIP) trading program rules. The final rule can be found in 71 FR 25328 with changes located from pages 25380 – 25396. The final rule language must be included in the CAIR rules of each State that wants to participate in the EPA-administered trading programs. Please keep this in mind as you move forward through your rulemaking process so that the final language can be included in your final rules. Because Missouri has incorporated a large part of the trading rules by reference, this will simplify the adoption of any changes to incorporated provisions of the model rule. The publication date indicated for the incorporated rule provisions can simply be (and will need to be) revised to reference an updated version of the model rule.

### **10 CSR 10-6.366 CAIR SO<sub>2</sub> Trading Program**

- 1) Subsection (1)(A) – This provision needs to be revised to reflect the applicability provisions finalized on April 28, 2006. In addition, EPA notes that some of the cross-references in the current Subsection (1)(A) are not correct.  
Subsection (1)(A)1. – “Except as provided in subsections (B) and (C) of this section...” should read “Except as provided in **paragraph 2.** of this subsection...”. Retired units continue to be CAIR SO<sub>2</sub> units.  
Subsection (1)(A)2. – “...the unit shall be subject to subsection (A) of this section...” should read “...the unit shall be subject to **paragraph 1.** of this subsection...”.
- 2) Section (1)(B) – This entire provision must be removed. Under 40 CFR 51.124 (o), states that want to participate in the EPA-administered CAIR SO<sub>2</sub> Trading Program may modify certain sections of the model rule. Because 40 CFR 51.124(o) does not allow modifications of the applicability provisions of the CAIR SO<sub>2</sub> model rule, the provision "Low Emission -- Low Run Hour Exemptions" in Missouri's CAIR SO<sub>2</sub> rule is not approvable and will need to be removed if Missouri wants to participate in the EPA-administered CAIR SO<sub>2</sub> Trading Program.
- 3) Subsection (1)(C) – EPA suggests that Missouri incorporate by reference the retired unit exemption provision (§96.205) in the model rule rather than reproducing in Missouri's rule the language of the model rule provision. Incorporation by reference would remove the potential for unintentional errors and facilitate Missouri's adoption of any future changes in the model rule provision. If Missouri prefers to reproduce the exemption provision, the corrections below for Subsections (1)(C) and (D) should be made.

- 4) Subsection (1)(C)1.A – “subpart III” should read “subpart III **of 40 CFR Part 96**”, and “...§96.206(c)(4) through (8), §96.207, ...” should read “...§96.206(c)(4) through (7), §96.207, §96.208,...”.
  - 5) Subsection (1)(C)1.C. – “subpart CCC” should read “subpart CCC **of 40 CFR Part 96**”
  - 6) Subsection (1)(C)2.F. – “subpart HHH” should read “subpart HHH **of 40 CFR Part 96**” and “...commences operation and commercial operation...” should read “...commences commercial operation...”.
  - 7) Subsections (2)(A) and (3)(A) – These provisions should reference the model rule provisions promulgated as of April 28, 2006. Subsection (3)(A) must include in the incorporation by reference §§96.206, 96.207, and 96.208.
  - 8) Subsection (4)(A) – This provision should reference the model rule provisions promulgated as of April 28, 2006.
  - 9) Subsections (4)(B) and (4)(C) – These entire provisions must be removed. (See explanation in comment # 2.)
  - 10) When Subsections (4)(B) and (4)(C) are removed, only Subsection (4)(A) remains. EPA suggests adding section HH to the incorporation by reference of the other model rule sections in Subsection (3)(A). Then, if Subsection (4)(A) is integrated in Subsection (3)(A), in Subsection (1)(C)2.F, the reference to “subsection (4)” would need to be changed to “section (3)”.
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The following comments were submitted by Kansas City Power and Light on July 27, 2006.

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#### **Comments of the Kansas City Power and Light on proposed rule 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**

The following comments on the Missouri Department of Natural Resources Air Pollution Control Program’s draft proposed rule in response to the Environmental Protection Agency’s Clean Air Interstate Rule were submitted by the Kansas City Power and Light.

Within the workgroup process compromises were made as the rule was developed. For example, KCP&L believes that the Energy Conservation pool of NO<sub>x</sub> allowances could have been better used by being allocated to existing units. In addition, the tire-derived fuel provision provides extra allowances to utilities that burn tire-derived fuel. KCP&L currently would not utilize the benefits of the latter provision. Compromises were, however, reached on these issues.

The participant utilities agreed early in the process that the allocation of NO<sub>x</sub> allowances to all existing units in the state should be treated the same. The federal rule had provided for special provisions for “new units” that went on line after January 1, 2001. These provisions would have unfairly impacted Hawthorn 5A, the only “new unit” in the state, which started operations in May of 2001, just a few months past the deadline. The “new unit” provisions would have adjusted the average heat input used to allocate NO<sub>x</sub> allowances based on a heat rate of 7900 BTUs/KWHr. This adjustment is based on an

assumption made by EPA that new units will operate at this heat rate level. KCP&L has over four years worth of CEM data on Hawthorn 5A that shows that its heat rate over that period has averaged around 10,500 BTUs/KWHr, consistent with our existing coal-fired units. To adjust allocations based on the “new unit” approach would have unjustly penalized the only “new unit” in the state. The other utilities in the state agreed to this approach for NOx allocations during the stakeholder process.

In its proposed rules MoDNR decided to treat allocations for mercury on the same basis as NOx, treating all existing units alike. KCP&L agrees with this approach and encourages the state to maintain it in the final rule. To do otherwise would again penalize “new units” by treating them differently from existing units. In Missouri's case this singles out only one unit in the state, Hawthorn 5A. The state's proposal decided to follow the model federal rule in allowing existing units that burn sub-bituminous coal to increase their heat input by a factor of 1.25 before calculating the allowance distribution based on each unit's proportional share of state-wide heat input. The utilities in the state agreed with this approach in the stakeholder process. The federal proposal, however, would deny this heat input factor to new units, those put in service after 2001, and would once again single out Hawthorn 5A as the only unit in the state that meets the new definition.

One utility in the state disagrees with the approach taken by the department and has commented that the proposed rule should be changed. KCP&L disagrees and supports the position taken by the department that the state rule should be consistent between the NOx allocations and the Mercury allocations, since all units are treated as existing units for NOx, the same should hold true for Mercury. Any federal assumption that “new units” are more easily controlled for mercury is not necessarily any more accurate than the assumption that “new units” can easily achieve a heat rate of 7900 BTUs/KWHr, an assumption that Hawthorn 5A's CEM data proves to be false. KCP&L has not yet installed any mercury control equipment at Hawthorn 5A and therefore does not have any more advantage over other state utilities for mercury control at their units.

In conclusion KCP&L supports the language in the proposed rule as your department after many months of review and participation by interested participants currently proposes it. Hawthorn 5A should be treated the same as all other electric generating units in the state.

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The following comments were submitted by the Empire District Electric Company on August 21, 2006.

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#### **Comments of Empire District Electric Company on rule 10 CSR 10-6.366 Clean Air Interstate Rule SO2 Trading Program**

The Empire District Electric Company (Empire) submits for the record these comments concerning draft proposed rules 10 CSR 10-6.362, 10 CSR 10-6.364, 10 CSR 10-6.366, and 10 CSR 10-6.368. Before proceeding to comments specific to each of these rules, Empire would like to thank the Missouri Department of Natural Resources (MDNR) for

supporting the market-based principles of the Clean Air Interstate Rule and Clean Air Mercury rule, rather than potentially less beneficial, more expensive command-and-control approaches. We also thank MDNR staff for working closely with stakeholders to develop methods for the allocation of allowances.

#### 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program

In paragraph (1)(B)1., “NO<sub>x</sub>” should be changed to “SO<sub>2</sub>”.

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The following comments were submitted by Chillicothe Municipal Utilities on August 28, 2006.

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#### **Comments of Chillicothe Municipal Utilities on rule 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**

Chillicothe Municipal Utilities (CMU) previously provided comments in support of the proposed regulations because there was an exemption for affected units that have low emissions or low run hours. EPA has commented that the exemption for such units must be removed in order for Missouri to participate in the regional trading program.

Without the exemption for low emission or low run hour units, CMU will be forced to participate in the NO<sub>x</sub> and SO<sub>2</sub> trading programs and be required to purchase allowances for their future emissions. While this will add a significant cost to future operations, the most significant cost will be imposed with future monitoring to be Part 75 requirements for Low Mass Emission (LME) units. CMU has always monitored the run time and fuel consumed for the combustion turbines in order to report emissions and to comply with permit conditions applicable to the combustion turbines. However, the Part 75 monitoring requirements are much more cumbersome and costly than Missouri currently allows for demonstrating permit compliance and annual emission reporting.

Without the exemption, CMU requests the proposed rules allow alternative monitoring, similar to what is currently allowed in Missouri for permit compliance or EIQ reporting, in lieu of Part 75 requirements for units that qualify as LME. The Part 75 procedures allow default values that are too conservative, essentially over reporting emissions. Over reporting reduces the budget of NO<sub>x</sub> emissions available to participants in the trading program and increases the cost per allowance when more must be purchased than actually used. If a source wants to use site specific emission rates for reporting, the Part 75 procedures require specific testing procedures and frequencies that must be met to use site specific test results, with re-testing required on a five-year and possibly more frequent time periods. For units with very low run hours, the time to conduct testing can approach the annual run time a unit would otherwise operate.

For low emission or low run hour units CMU requests the agency include a provision in each of the rules referenced above that allows alternative monitoring procedures similar to what is already in use for reporting emissions. The added cost to refine the emission rates for low emission units does not justify the cost that will be incurred to refine the emission. And the difference in emissions to report will be insignificant for these low

emission units. Use of the default emission factors allowed for LME units will also impose a substantial penalty to the source that determines its emissions from default values because the source will be required to buy more allowances than are needed since the default values over report actual emissions.

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The following comments were submitted by the Associated Electric Cooperative, Inc. on August 28, 2006.

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**Comments of Associated Electric Cooperative, Inc. on rule 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**

Associated Electric (AECI) would like to comment that the communication and cooperation afforded by the CAIR/CAMR stakeholder meetings was to the benefit of all parties. Implementation of such complex rule language is a major undertaking and the Missouri Department of Natural Resources (MDNR) is to be commended for initiating a fair and open forum. We look forward to engaging in such efforts in the future.

Second, AECI supports the rule language and unit allocations as written in 10 CSR 10-6.363, 6.3264, and 6.366 with the qualified exceptions. Section (3)(B) of both the annual and seasonal NO<sub>x</sub> rules detail when and how the agency will submit to the Administrator the unit allocation per an approved state implementation plan. The language under these sections does not make it clear that the unit allocations will be permanent for the duration of these rules. AECI requests that language be added under this section to clarify that the unit allocations are permanent. On a clerical note, in paragraph (1)(B)1 of the SO<sub>2</sub> rule, “NO<sub>x</sub>” should be changed to “SO<sub>2</sub>.”

Third, we support the language of the May 4, 2006 “Proposed Rule Language for EE/RE Set-Aside in CAIR Annual NO<sub>x</sub> Rule.” Specifically, we support the proposed EE/RE language under E(1)(V)(c) which provides preference for Missouri based projects when awarding CAIR allowances from the EE/RE set-aside. AECI believes that all Missourians stand to benefit from energy efficiency and renewable energy projects. The fruition of proposed renewable energy projects, such as the planned wind projects in Northwest Missouri, will result in construction and maintenance jobs, income to local land owners, and will generate local and state tax revenue. While other such projects in neighboring states may provide some offsets for fossil fuel generation in Missouri, they will not directly benefit Missourians as stated above. In summary, AECI believes the preference is good policy and is appropriately placed.

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The following comments were submitted by Ameren on August 28, 2006.

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**Comments of Ameren on rule 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**



As a general comment, Ameren strongly supports the stakeholder process adopted by the Air Pollution Control Program to develop the proposed regulations. The stakeholder process provides an opportunity for all interested parties to participate in the rulemaking and communicate their concerns to the Air Program. Ameren supports implementation of the federal Clean Air Interstate Rule and the Clean Air Mercury Rule including the adoption of the trading programs. We look forward to continued open dialogue with the Air Program to finalize the rules and implement the federal programs.

#### **Draft Proposed Rule 10 CSR 10-6.366 Clean Air Interstate Rule SO<sub>2</sub> Trading Program**

Ameren supports the proposed Clean Air Interstate Rule SO<sub>2</sub> Trading Program rule.

Ameren supports the proposed exemption for units with low emissions or low hours of operation. The exemption provides relief for units that are not currently affected by the Acid Rain Program and is consistent with the exemptions provided in several existing Missouri regulations including the statewide NO<sub>x</sub> trading rule (10 CSR 10-6.350) and the NO<sub>x</sub> RACT rule for the St. Louis area (10 CSR 10-5.510). AmerenUE has at least eight combustion turbine units including Fairgrounds, Howard Bend, Meramec CT1 and CT2, Mexico, Moberly, Moreau and Viaduct that are eligible for exemption. On average, the units have operated less than 100 hours per year over the last six years. The units are not required to have continuous emission monitoring systems under existing regulations. A requirement to install, certify and operate a continuous emission monitoring system would impose both an economic and resource burden, especially since the units have very low hours of operation.